

appended claims.

**WHAT IS CLAIMED IS:**

1       1. A method of improving the uniformity of etching of a film  
2           on an article, the method comprising the steps of:

3           immersing the article containing the film into a tank of  
4           etchant;

5           rotating the article while in the etchant for a predetermined  
6           amount of time so as to cause improved uniformity of etching  
7           of the film compared to etching without rotating the article;  
8           and

9           removing the article from the tank of etchant.

1       2. The method of claim 1 wherein the step of rotating  
2           comprises sequentially rotating the article.

1       3. The method of claim 1 wherein the step of sequentially

2       rotating comprises rotating the article a predetermined amount  
3       but less than a complete rotation, etching the article a  
4       predetermined amount of time, and repeating the steps of  
5       rotating and etching for a predetermined amount of time.

1       4. The method of claim 1 wherein the step of rotating  
2       comprises continuously rotating the article a predetermined  
3       amount of time.

5. The method of claim 1 wherein in the step of rotating, the article is rotated at a speed of 1 to 5 revolutions per minute.

6. The method of claim 1 wherein the film is a metallic film.

1       7. The method of claim 1 wherein the film is a nonmetallic  
2       film.

1       8. A method of improving the uniformity of etching of a film  
2       on a semiconductor wafer, the method comprising the steps of:

3           immersing the semiconductor wafer containing the film into a  
4           tank of etchant;

5           rotating the semiconductor wafer while in the etchant for a  
6           predetermined amount of time; and

7           removing the semiconductor wafer from the tank of etchant.

1           9. The method of claim 8 wherein the step of rotating  
2           comprises sequentially rotating the semiconductor wafer.

3           10. The method of claim 8 wherein the step of sequentially  
4           rotating comprises rotating the semiconductor wafer a  
5           predetermined amount but less than a complete rotation,  
6           etching the semiconductor wafer a predetermined amount of  
7           time, and repeating the steps of rotating and etching for a  
8           predetermined amount of time.

1           11. The method of claim 8 wherein the step of rotating  
2           comprises continuously rotating the semiconductor wafer a  
3           predetermined amount of time.

1           12. The method of claim 8 wherein in the step of rotating,  
2           the semiconductor wafer is rotated at a speed of 1 to 5  
3           revolutions per minute.

1           13. The method of claim 8 wherein the semiconductor wafer  
2           further comprises a plurality of solder bumps on the film.

14. The method of claim 8 wherein the film is a metallic  
film.

15. The method of claim 8 wherein the film is a nonmetallic  
film.